

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
Root Cause				FAULT CATEGORY																					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐															
OTHER : ☐																									

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' September 09, 2015 3:39:30 PM

Stop *NS2*

Customer:

Reference:

Run Start *NR1*

Stop ***NR2***

MC5 SEP 28 2015

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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																																																										
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 1

Work Order ID: 136830

136830

Parent Item: D119-796-101

D119-796-101

Parent Item Name: FWD Crosstube Installation with Step

Start Date: 9/9/2015

Required Date: 9/23/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 14-09-05 DD VERF:JLM IPP REV:B
14.10.22 AS PER PA1 DD VERF:JLM IPP REV:C 14.11.19
AS PER IIN REV.B DD VERF:JLM IPP REV:D 15.02.12 PER REV
C JLM VERIFIED BY:DD IPP REV:E 15.05.13 PER REV D JLM
VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D119-796-151		Manufactured	No				Each	2.0000		1			
D119-796-151 FWD Crosstube Installation with Step (no hardware)									**		134 577		DAS 02 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG				2					
				131119				1					
				134516				1					
D3672-7		Manufactured	No				Each	786.0000		8			
D3672-7 Washer, Phenolic									**				DAS 02 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG				40					
				129987				25					
				133986				15					
				ST051A				500					
				134786				500					
				ST055				246					
				120476				6					
				129987				39					
				133986				201			8		

SEP 10 2015

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 136830

136830

Parent Item: D119-796-101

D119-796-101

Parent Item Name: FWD Crosstube Installation with Step

Start Date: 9/9/2015

Required Date: 9/23/2015

Start Qty: 1.00

Required Qty: 1.00

AN5C32A

Purchased

No

Each

143.0000

4

AN5C32A

BOLT

DAS
02
9-89

**

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

4

18918

4

ST286A

100

131650

100

ST336

39

m132102

39

Each

0.0000

4

**

132677

MS21250-05048

Purchased

No

MS21250-05048

BOLT (use MS21250-05-048)

DAS
02
9-89

AN5C7A

Purchased

No

AN5C7A

BOLT

DAS
02
9-89

**

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

2

19185

2

ST286A

150

m131320

150

ST338

171

m132123

71

m132930

100

SEP 10 2015

DSI 9730-011 DAS
02
9-89

X1 B: 137041

159-28

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
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			Lead hand / Supervisor Approval Verification		
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

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Work Order ID: 136830

136830

Parent Item: D119-796-101

D119-796-101

Parent Item Name: FWD Crosstube Installation with Step

Start Date: 9/9/2015

Required Date: 9/23/2015

Start Qty: 1.00

Required Qty: 1.00

MS21043-5

Purchased

No

Each

272.0000

4

MS21043-5

DAS
02
9-89

**

DAS
27
9-89

Nut

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST304

176

m129499

4

m132382

172

Each

423.0000

8

NAS1149C0532R

Purchased

No

NAS1149C0532R

**

DAS
27
9-89

WASHER

DAS
02
9-89

Location

Loc Qty

Loc Code

GA

60

116513

60

ST271

363

m128537

40

m131624

23

m133031

300

Each

547.0000

12

NAS1149C0563R

Purchased

No

NAS1149C0563R

**

DAS
27
9-89

Washer

DAS
02
9-89

Location

Loc Qty

Loc Code

ST260a

500

m131697

500

ST271

47

m131026

47

DQA: _____ Date: _____



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Misidentified ☐	Past Due ☐																																																																

3.0 PARTS LIST

QTY -011	PART NUMBER	DESCRIPTION
	DSI9730-011	SHIM KIT
2	D5305-1	SHIM
2	MS21920-24	CLAMP

DAS
02
9-89

REFERENCE ONLY

4.0 WEIGHT AND BALANCE

There is negligible weight and balance change associated with this modification.

DESIGN	AP	DART AEROSPACE, LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	AP	
CHECKED		DRAWING NO. REV.A
MFG. APPR.	N/A	DSI 9730 SHEET 3 OF 3
APPROVED		TITLE SCALE
DE APPR.		FWD CROSSTUBE SHIM INSTL NTS
DATE	15.08.20	COPYRIGHT © 2015 BY DART AEROSPACE, LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE, LTD.

REFERENCE ONLY

5.0 PARTS LIST

5.1 STANDARD GEAR CROSSTUBES

Item	-101	-201	-103	-203	-141	-241	-151	-251	Part Number	Description
	X								D119-796-101	FWD CROSSTUBE INSTALLATION WITH PEG STEPS
		X							D119-796-201	AFT CROSSTUBE INSTALLATION WITH PEG STEPS
			X						D119-796-103	FWD CROSSTUBE INSTALLATION W/O PEG STEPS
				X					D119-796-203	AFT CROSSTUBE INSTALLATION W/O PEG STEPS
			1		X		1		D119-796-141	CROSSTUBE INSTALLATION, STANDARD FWD, W/O PEG STEPS
				1		X		1	D119-796-241	CROSSTUBE INSTALLATION, STANDARD AFT, W/O PEG STEPS
	1						X		D119-796-151	CROSSTUBE INSTALLATION, STANDARD FWD, WITH PEG STEPS
		1						X	D119-796-251	CROSSTUBE INSTALLATION, STANDARD AFT, WITH PEG STEPS
1					4	4			D2873-043	RADIUS BLOCK
2	8	8	8	8					D3672-7	WASHER
3						1			D5122-1	CENTER SUPPORT
4						6			D5123-1	CLAMP CUSHION
5					4		4	4	D5123-3	CLAMP CUSHION
6						2			D5123-5	CLAMP CUSHION
7					2				D5124-1	FWD SUPPORT
8						1			D5134-041	DAMPER SUPPORT ASSY, LH
9						1			D5134-042	DAMPER SUPPORT ASSY, RH
10						1			D5136-1	CONTACT PAD, LH
11						1			D5136-2	CONTACT PAD, RH
12							2		D5149-041	FWD STEP ASSY
13								2	D5149-043	AFT STEP ASSY
14					2				D5152-041	FWD POST MOUNT ASSY
15						2			D5152-043	AFT POST MOUNT ASSY
16						16			CR3212-4-07	RIVET
17					16				CR3212-4-08	RIVET
18							4		MS21920-22	CLAMP
19					4				MS21920-24	CLAMP
20						6		4	MS21920-25	CLAMP
21		2		2		2			MS21920-28	CLAMP
22	4	4	4	4					AN5C32A	BOLT
23	4	4	4	4					MS21250-05048	BOLT
24	12	12	12	12					AN5C7A	BOLT
25	4	4	4	4					MS21043-5	NUT
26	8	8	8	8					NAS1149C0532R	WASHER
27	12	12	12	12					NAS1149C0563R	WASHER
100		1		1					DP460	SCOTCH WELD ADHESIVE (37mL)